

RECEIVED
DEC 8 1969
FISHERIES DIVISION

NARRATIVE SUMMARY
November, 1969

Reservoir Investigations

303404

Joe E. Huston

The spawning run of mountain whitefish passing through the Hungry Horse Creek trap started October 22nd and stopped November 21st. The trap is located about one-half mile above the mouth of Hungry Horse Creek when the reservoir is at full pool level. It has been estimated that when Hungry Horse is full about half of the whitefish would spawn below the trap and the remainder above the trap. This year the reservoir was drawn down about 40 feet and large numbers of whitefish spawned in the stream channel that is normally inundated by the reservoir.

During the month 186 spawning whitefish were passed through the trap. Of these, 146 were males and 40 females. The males averaged 11.9 inches total length and ranged from 9.5 to 15.5 inches. Females averaged 12.5 inches total length and ranged from 10.0 to 14.2 inches. Egg counts on two females, 13.0 and 13.4 inches total length, averaged 3,018 eggs each.

Creel-census information was obtained from Hungry Horse Reservoir and its tributary streams during the general big-game hunting season. Anglers fishing the reservoir are primarily fishing for westslope cutthroat trout whereas anglers fishing tributary streams are seeking mountain whitefish. Thirty-five reservoir anglers caught 152 cutthroat at a rate of 1.54 fish per hour. One hundred thirty-three stream anglers caught 1,743 whitefish at an average rate of 4.04 per hour. Compared to previous year's data the number of anglers was down and the catch rate was up; this probably an effect of the reservoir drawdown.

Testing of boat mounted electrofishing gear suitable for use in the Kootenai River was started. Two day-time and two night-time trips have been made to date. Day-time efforts yielded about 3 fish per hour versus a yield of about 100 fish per hour during night-time excursions. Minor modifications in the gear, particularly recovery gear, should increase the catch rate at least two-fold. Catch near Warland (ten miles above Libby dam) was about 90 percent whitefish, 3 percent trout, and 7 percent suckers. Catch near the mouth of Fisher River (four miles below Libby dam) was about 50 percent each suckers and whitefish. Redside shiners were abundant in both areas but have not been entered in the catch statistics.

The Prospect Creek trap was fished continuously from October 4th through November 14th to enumerate brown trout entering for spawning. Total catch consisted of two male brown trout, 17.5 and 11.0 inches total length, three suckers, and one brook trout.

Preliminary stream channel alignment survey of a man-made stream in the Thompson Falls area was completed. The landowner plans on piping 250 miner's inches of water about 7,000 feet for the water source of this new stream. This "new" stream should be about 1,700 feet long and will include a small reservoir near its end to serve as a source of irrigation water.